

REMARKS/ARGUMENTS

Applicants submit this Amendment, in reply to the Office Action mailed December 16, 2005¹.

In the Office Action, the Examiner rejected claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,743,004 to Chobot et al. (“Chobot”) and rejected claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Chobot.

In this Amendment, Applicants amend claim 1 to improve clarity. Claims 1-7 remain pending in this application.

At the outset, Applicants note that claim 1 has been amended to recite “wherein the heat conducting apertured portion conducts heat to peripheral areas of the through-holed portion.” Support for these changes to claim 1 can be found in the Applicants’ specification, for example, at page 11, lines 17-20.

Claim Rejections Under 35 U.S.C. § 102(b)

Applicants respectfully traverse the Examiner’s rejection of claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by Chobot. In order to properly establish that Chobot anticipates Applicants’ claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” See

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Chobot does not anticipate amended claim 1, for example, because the reference fails to teach each and every element of the claim. In particular, Chobot at least fails to teach the claimed “heat conducting apertured portion [that] conducts heat to peripheral areas of the through-holed portion,” as recited in amended claim 1.

The Examiner alleges that “Chobot et. al. teaches . . . a heat conducting apertured portion extending through the wiring circuit board (Fig. 9, wall of #33) . . . [and] being formed in the vicinity (see Fig. 9) of the through-holed portion.” Office Action, page 2, ¶ 3. Chobot, however, discloses that “[a]n advantage of these tie vias [in Figs. 9 and 10] is that the thermal mass is concentrated at the tie vias rather than in the plated through hole, thereby concentrating thermal mass away from the plated through hole.” Col. 8, ll. 22-25 (emphasis added). Thus, Chobot fails to teach the claimed “heat conducting apertured portion [that] conducts heat to peripheral areas of the through-holed portion,” as recited in amended claim 1. (Emphasis added).

Accordingly, amended claim 1 is allowable over Chobot. Further, claims 2-4 are allowable at least due to their dependence from amended claim 1.

Claim Rejections Under 35 U.S.C. § 103(a)

Applicants respectfully traverse the Examiner’s rejection of claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Chobot. In order to properly establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), using a single reference, each of three requirements must be met. First, the reference must teach or suggest all

the claim limitations. M.P.E.P. 2143.03 (8th ed., Rev. 3, August 2005). Second, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference in a manner resulting in the claimed invention. M.P.E.P. 2143.01 (8th ed., Rev. 3, August 2005). Third, there must be a reasonable expectation of success that the proposed modification would work for the intended purpose. M.P.E.P. 2143.02 (8th ed., Rev. 3, August 2005). Moreover, the second and third requirements “must both be found in the prior art, not in applicant’s disclosure.” M.P.E.P. 2143 (8th ed., Rev. 3, August 2005).

With respect to the Examiner’s rejection of claims 5-7, Chobot does not teach or suggest the claimed “heat conducting apertured portion [that] conducts heat to peripheral areas of the through-holed portion,” as discussed above with respect to amended claim 1. Claim 1, therefore, is not unpatentable over Chobot. Further, claims 5-7 are allowable over Chobot, at least due to their dependence from claim 1.

Claim Scope

In discussing the specification, claims, and drawings in this Amendment, it is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicants believe that Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this Application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: March 15, 2006

By: Roger P. Bonenfant
Roger P. Bonenfant
Reg. No. 58,030